

linergic medications. The highest prevalence was seen for Level 1 medications (52.37%) followed by Level 2 (3.02%) and Level 3 (2.31%) medications. The prevalence of concurrent use of anticholinergic medications of various levels was 8.42% (7.53–9.32). Multinomial regression analysis revealed that predisposing (age) and need (behavioral symptoms, activities of daily living, out of bed mobility and depression) factors were positively associated with Level 1 drug use. Need factors (behavioral symptoms and total number of medications taken) were found to be negatively associated with Level 2 drug use whereas need factors like parkinsonism and depression were positively associated with receiving Level 3 medications and concurrent use, respectively. **CONCLUSIONS:** Nearly three of four elderly nursing home residents with dementia received anticholinergic medications of different levels. The findings suggest that there is a need to optimize anticholinergic medications in dementia patients, especially the higher level agents due to their significant adverse profile in dementia patients.

PMH22

THE IMPACT OF OUTPATIENT MENTAL HEALTH SERVICES ON RE-ARRESTS AMONG GROUPS OF INDIVIDUALS WITH A SERIOUS MENTAL ILLNESS IN TWO URBAN COUNTIES, ONE IN FLORIDA AND ONE IN TEXAS

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OBJECTIVES: Individuals with a serious mental illness (SMI) often experience recidivistic patterns in the criminal justice system (CJS). It has been argued that the provision of mental health services can disrupt this pattern. We examined the impact of community based mental health services on the arrest patterns of adults with a SMI who became involved in the CJS in Pinellas County Florida and Harris County Texas. **METHODS:** We identified adults 18–64 years old in Florida and Texas with a SMI who spent at least one day in jail during an index year. Statewide and local administrative data sets were used to document their patterns of arrests and utilization of health and mental health services over 3–4 year periods. Generalized estimating equations were used for count data to estimate the association of outpatient and ER/inpatient mental health contacts in a quarter and arrests in the subsequent quarter. Individual fixed effects models were also estimated to account for unobserved time invariant factors correlated with treatment and the likelihood of arrest. **RESULTS:** We identified 3769 and 8505 individuals in the Florida and Texas data sets respectively. In Florida, individuals receiving outpatient services in a quarter were 20% less likely to be arrested in the subsequent quarter. The effect was greater for misdemeanor than for felony arrests. Individuals receiving ER/inpatient services were 7% more likely to be arrested in the subsequent quarter, and 13% more likely to have a felony arrest. The association between outpatient mental health services and arrests was confirmed by the individual fixed effects model. Parallel analyses are underway using Texas data to determine if the relationships hold for different jurisdictions and time frames. **CONCLUSIONS:** Outpatient mental health services were associated with a decrease in the risk of arrests among groups of individuals with a SMI and criminal justice involvements.

PMH23

DEMOGRAPHIC AND CLINICAL PREDICTORS OF HIGH-DOSE PRESCRIPTION OF DULOXETINE IN PATIENTS WITH MAJOR DEPRESSIVE DISORDER

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OBJECTIVES: Optimal treatment of major depressive disorder (MDD) includes the selection of an adequate antidepressant medication and its delivery at a fully therapeutic dose for adequate treatment duration. Many factors may influence a physician's decision making with respect to antidepressant choice and appropriate dose level. This study examined the pretreatment predictors of high-dose prescription of duloxetine for MDD patients in the real world clinical setting. **METHODS:** In a large commercial managed-care claims database, 6,132 MDD patients, who were initiated on duloxetine between July 1, 2005 and June 30, 2006, had no prior prescription of duloxetine for 6 months, and had continuous enrollment for both 12 months prior to and post initiation, were included. The associations between demographics and pre-initiation clinical variables and the maximum prescribed duloxetine dose (high: > 60 mg/day; mid: 60 mg/day) were examined by chi-square tests and logistic regression. **RESULTS:** Of the sample, 16.3% had a maximum prescribed duloxetine dose of less than 60 mg/day; 59.3%, 60 mg/day; and 24.4%, >60 mg/day. Compared with mid-dose patients, high-dose patients were older; had more comorbidities of neuropathic pain, osteoarthritis, fibromyalgia, drug dependence, and bipolar disorders; were more likely to be treated by psychiatrists; used more benzodiazepines, venlafaxine, atypical antipsychotics, psychostimulants, and anticonvulsants; and had higher pharmacy and medical costs in the prior 1 year (All p values < .05). After adjustment for health plan type and geographic region of residence, the following factors were independently associated with high-dose prescription: older age (36–64 vs. 18–35 years, OR = 1.34–1.53), neuropathic pain (OR = 1.56), prior use of psychostimulants (OR = 1.32), benzodiazepines (OR = 1.22), venlafaxine (OR = 1.24), atypical antipsychotics (OR = 1.35), and physician specialty (psychiatrist vs. non-psychiatrist, OR = 1.54). **CONCLUSIONS:** Multiple demographic and clinical characteristics and prior costs are associated with a high-dose duloxetine prescription. High-dose treated patients may represent a group of complicated patients with high medical costs who need intensive treatment.

PMH24

ASSOCIATION OF ANTIDEPRESSANT THERAPY AND BIPOLAR DISORDER (BD)-RELATED RE-HOSPITALIZATIONS AMONG PATIENTS WITH MANIC OR MIXED BD EPISODES

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OBJECTIVES: Bipolar disorder (BD) treatment guidelines state that antidepressants (ADs) may precipitate, or exacerbate manic or mixed episodes and generally recommend tapering or discontinuing ADs for patients with recent acute manic or mixed episodes. This study assessed the association between continued AD use and BD-related re-hospitalizations among BD patients. **METHODS:** Using the PharMetrics Patient-Centric Database from January 1, 2004–June 30, 2007, we identified adults with an acute psychiatric event (“index event”), defined by hospitalizations, emergency room visits, or physician visits with a prescription for a new BD medication with a primary diagnosis of BD I mania or BD I mixed. All patients were required to be eligible for the 12 months before and after index event and have a BD-related hospitalization (any diagnosis of any BD subtype) in the pre-index period. Patients with schizophrenia at any time during the study period were excluded. Continued AD use was defined using prescription drug claims as 30+ days of available AD therapy within 120 days after the index event. Logistic regression—controlling for age, sex, geographic region, baseline comorbidities—was used to determine the association between continued AD use and post-index BD-related re-hospitalizations (any diagnosis of any BD subtype). **RESULTS:** A total of 2126 patients met study criteria (mean age, 44; 57% female). 433 BD patients (20.4%) were re-hospitalized within 1 year. Patients receiving continued AD therapy (31.5%) were significantly more likely to be re-hospitalized (OR, 1.387; 95% CI, 1.102, 1.748) than those without continued use. Other predictors of increased risk of re-hospitalization included being female and baseline diagnoses of comorbid substance abuse and eating disorders. **CONCLUSIONS:** Continued AD use in manic or mixed BD may be inappropriate. In this study, AD use for 30+ days within 120 days after an acute episode was associated with greater risk of BD-related re-hospitalization.

PMH25

ASSESSMENT OF HOSPITALIZATION RISK AMONG PATIENTS WITH BIPOLAR I DISORDER TREATED WITH ANTIPSYCHOTIC THERAPY IN A COMMERCIALLY INSURED POPULATION

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OBJECTIVES: To evaluate risk and predictors of hospitalization among commercially insured patients with bipolar I disorder. **METHODS:** Retrospective cohort analysis using the PharMetrics Patient-centric Database, including patients with ≥1 inpatient or ≥2 outpatient medical claims indicating bipolar I disorder and ≥1 prescription for an antipsychotic medication between 7/1/2005, and 3/31/2007. Patients were followed 1 year from date of first (index) antipsychotic prescription. Continuous health benefit eligibility from 1 year before (baseline) through 1 year after (follow-up) index was required. Patients had to receive ≥1 additional antipsychotic claim during follow-up to ensure a treated population. Adherence was measured using medication possession ratio (number of outpatient-treated days divided by total number of outpatient days during follow-up). Multivariate logistic regressions were used to identify factors associated with all-cause (AC) and psychiatric-related (PR) hospitalization. **RESULTS:** A total of 12,100 patients were eligible. Mean (±SD) patient age was 37.2 (±15.7) years, 59.9% were female; 22.8% had baseline diagnoses of substance abuse, and 49.8% had other psychiatric conditions. During follow-up, 27.9% of patients had AC and 25.3% had PR hospitalizations. On average (±SD), patients had 0.5 (±1.1) AC and 0.4 (±1.0) PR hospitalizations. Baseline substance abuse or diagnosis of other psychosis; use of antidepressants, anxiolytics, or anticholinergics; psychiatric hospitalization; and nonadherence to antipsychotic therapy during follow-up were associated with significantly greater risk ($P < 0.05$) of AC and PR hospitalizations; age < 35 years was also associated with significantly greater risk of PR hospitalization. Baseline anticonvulsant use was associated with significantly lower risk of PR hospitalization. **CONCLUSIONS:** Several patient characteristics appeared to be associated with greater risk of hospitalization among commercially insured bipolar I patients receiving antipsychotics. These findings may be useful to health plan administrators interested in targeted interventions, though further research on the impact of such interventions is needed. Supported by funding from Ortho-McNeil Janssen Scientific Affairs, LLC.

PMH26

A COMPARISON OF TRANSITIONS BETWEEN HEALTH STATES AND INSTITUTIONALIZATION AMONG ALZHEIMER'S DISEASE PATIENTS VERSUS NON-ALZHEIMER'S DISEASE DEMENTIA PATIENTS USING THE NACC-UDS DATABASE

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OBJECTIVES: Compare transitions between mild, moderate and severe health states, and to death or institutionalization for Alzheimer disease (AD) and non-AD dementia patients. **METHODS:** The National Alzheimer Coordinating Center's Uniform Data Set (NACC-UDS) is a large, longitudinal dataset funded by the National Institute of Aging that includes AD and non-AD dementia patients, and non-demented controls.